

# STATE OF COLORADO

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Bill Ritter, Jr.  
Governor

## COLORADO'S NEW ENERGY ECONOMY

Gov. Ritter's internationally recognized New Energy Economy blends Colorado's abundant renewable and traditional natural resources, highlights Colorado's intellectual resources, and emphasizes efficiency and conservation. The New Energy Economy leader has stimulated economic opportunity and created jobs throughout the state, including rural agricultural areas.

Gov. Ritter's focus has led to a doubling of Colorado's renewable energy requirement and to creation of Colorado's first Climate Action Plan. The New Energy Economy is securing Colorado's energy future, economic future and environmental future.

**Renewable Energy Jobs and Development:** *Colorado completed a comprehensive mapping of the state's renewable energy resources, identifying 122 gigawatts of potential wind & solar energy.*

*Wind Energy: Colorado is ranked 6<sup>th</sup> nationally in wind energy resources.*

- Denmark-based Vestas Blades opened its first North American manufacturing plant in Colorado in March 2008. The plant brings 600 new jobs and produces 1,800 giant blades for wind turbines each year.
- On August 15, 2008, Vestas announced it is expanding its Colorado operations by building two new manufacturing plants in Brighton.
- The new wind-blade production plant and nacelle assembly factory represent a \$290 million capital investment and will bring 1,350 new jobs to Colorado.
- All told, Vestas' entire commitment to Colorado represents a nearly \$700 million capital investment and 2,450 new jobs.
- Siemens Energy announced plans to open a wind turbine research and development center in Boulder in 2008, and will enter into a cooperative research agreement with NREL to install pilot wind turbine with a 101-meter rotor at the Golden-based lab's National Wind Technology Center located south of Boulder.
- Renewable Energy Systems America Inc. relocated from Texas to Colorado in March 2008. The company designs, builds and operates wind farms.
- Texas-based Dragon Wind will open a plant in Lamar, to build 262-foot steel towers for turbines.
- Woodward Governor announced in March 2008 it will add up to 100 employees in Northern Colorado. The company manufactures wind turbine inverters.
- Three new wind farms opened in 2007, generating nearly 650 megawatts of electricity, enough energy to power 250,000 homes.

*Solar Energy: Colorado is ranked 11<sup>th</sup> in solar resources and has six solar companies.*

- Abengoa Solar has located its headquarters in Lakewood.
- Ascent Solar in Lakewood has announced plans to build 1.5MW and 25MW production facilities.
- AVA Solar announced it will build a solar manufacturing plant in Longmont in 2008.

- PrimeStar Solar of Golden received more than \$3 million in public and private funding in 2007 to develop thin-film solar technologies.
- SunEdison's new 8.22MW photovoltaic facility generates power for 1,500 homes. Fort Carson opened the largest solar plant on a U.S. military base in January 2008. Residential rebates are available for solar electric and solar domestic hot water systems.

*Biofuels: There are five ethanol plants and over 75 E85 or Biodiesel refueling sites.*

- ConocoPhillips announced in February 2008 that it will open a Global Technology Center in Colorado to serve as an international hub for alternative-fuels research and development. The company also will locate its corporate training center here. The facility could produce and estimated 7000 jobs by 2010.

*Geothermal Energy: A geothermal task force is working to identify opportunities for direct use and potential power production.*

*Research & Development: Colorado has several world-class laboratories and universities*

- The Colorado Renewable Energy Collaboratory, a research partnership among the National Renewable Energy Laboratory and Colorado's research universities – Colorado State University, the University of Colorado at Boulder and Colorado School of Mines.
- Gov. Ritter announced in March 2008 Cenergy, a new Clean Energy Supercluster at Colorado State University to transfer biofuel, solar and wind R&D projects into commercial marketplace.
- Colorado State University established a new School of Global Environmental Sustainable to help prepare a new generation of green-collar workers.
- The National Renewable Energy Laboratory has begun adding 100 new jobs.

*Utilities: Xcel Energy announced in March 2008 that Boulder will be the nation's first Smart Grid City, creating new opportunities for people to use energy more efficiently and cost-effectively.*

**Colorado Climate Action Plan:** Gov. Ritter issued Colorado's first Climate Action Plan, which calls to reduce greenhouse gas emissions by 20 % by 2020, and 80 % by 2050.

**Greening of State Government Executive Orders:** Gov. Ritter set goals for Colorado state government to reduce its energy, paper, petroleum, water and waste by 2012.

**Legislative Accomplishments:** House Bill 1281 is the signature New Energy Economy bill, doubling the renewable energy requirements for Colorado utilities as initially established by voters in Amendment 37 in 2004. 20% percent of the electricity provided by major utilities, and 10% from rural electric providers now must come from renewable sources by 2020. In 2008, significant legislation was passed to promote renewable and energy efficiency.

**Community Partnerships Promote Renewable Energy & Energy Efficiency Statewide:** Gov. Ritter established the Governor's Energy Office (GEO) to implement renewable energy and efficiency programs with statewide partners. The GEO has developed the following programs:

- *Residential Energy:* Over 43 communities are participating in the Insulate Colorado and ENERGY STAR New Homes. Energy assistance was provided to 25,000 low-income families in 2007 through financial aid and energy efficiency and weatherization upgrades to permanently lower consumers' energy bills.
- *Commercial & Public Buildings:* Working with municipalities and 38 school districts to have higher-performing, more energy-efficient buildings through energy performance contracting.
- *Renewable Energy and Energy Efficiency and Economic Development Grants:*
  - \$656,000 in grants statewide to advance energy efficiency and renewable energy projects

- \$350,000 in Solar Innovation Grants
  - \$500,000 to the Residential Solar rebate program
  - \$150,000 to partners to promote small wind installations
  - Grants to mountain communities to handle pine-beetle forest waste
  - Gov. Bill Ritter launched a \$10 million New Energy Communities Initiative in June 2008, which is a partnership between the Colorado Department of Local Affairs (DOLA) and GEO. The aim is to maximize energy efficiency and conservation, enhance community livability, promote economic development in downtowns, and address climate change by reducing carbon emissions.
- GEO will launch Colorado Carbon Fund in fall 2008, a voluntary carbon offset program to provide high quality, credible offsets for individuals, businesses and government agencies interested in mitigating their carbon footprint.

### **National and International Honors**

- In July, Gov. Ritter took part in an expedition to the Norwegian Arctic to get a first-hand look at the effects of climate change. The expedition was organized and hosted by the Aspen Institute, National Geographic Society and Lindblad Expeditions. Gov. Ritter, the only elected official on the trip, was specifically invited to present his Colorado Climate Action Plan and participate in policy discussions throughout the trip, including a panel on innovative leadership and climate change
- Also this summer, Gov. Ritter led a New Energy Economy mission to Spain and met with executives of 10 key Spanish businesses, including two solar companies that already have operations in Colorado.
- Colorado received a personal visit from Swedish Prime Minister Fredrick Reinfeldt, one of Europe's leading proponents of renewable energy. Gov. Ritter has also met with the British economic minister and a number of other international envoys to discuss Colorado's role in renewable energy development.
- Colorado's New Energy Economy earned Gov. Ritter an opportunity to testify before the U.S. House Select Committee on Renewable Energy and Global Warming in support of a national renewable electricity standard and to tout the work being done in Colorado.